

*SPATHIUS CURVICAUDIS* RATZEBURG (HYM.: BRACONIDAE)  
NEW TO BRITAIN AND PARASITISING *AGRILUS*  
*PANNONICUS* (PILLER AND MITTERPACHER)  
(COL.: BUPRESTIDAE).

By M.R. SHAW\*

Recent papers in this Journal (Foster, 1987; Allen, 1988) and elsewhere (Godfrey, 1987) indicate an apparent upturn in the fortunes of the rare buprestid beetle *Agrilus pannonicus* (Piller and Mitterpacher) since its British status and history were reviewed by Allen in 1973. I am prompted to add to this chronicle by recording the presence in Britain of the doryctine braconid, *Spathius curvicaudis* Ratzeburg, which is probably specialised to bark-inhabiting buprestids and has recently been reared twice, almost certainly from *A. pannonicus*, at Windsor Great Park, Berkshire.

The first occasion was when J.A. Owen reared a brood of ten females and one male in June 1985 from a single mass of 14 cocoons collected in March 1985 in the bark of a living oak heavily infested by *A. pannonicus*, and the second was a brood of nine females and four males reared in July 1986 by H. Mendel from bark collected from the same tree in March 1986. In addition is one female specimen fogged from mature oak canopy at Richmond Park, Surrey, by N.E. Stork on 18.viii.1983; the first to be identified in Britain, but perhaps particularly noteworthy in view of Allen's (1988) comment that a specimen of *A. pannonicus* was fogged at the same site in June 1984, and the suggestion that the beetle may regularly breed high in the tree.

*S. curvicaudis* differs from all other species of *Spathius* known to occur in Britain by its markedly up-curved ovipositor (see Nixon, 1943: 201, fig. 16), which projects beyond the apex of the gaster by about the latter's length. The available British specimens clearly belong to the *exarator*-group, but then do not run easily to *curvicaudis* in Nixon's (1943) key because they mostly have only very indistinct coriaceous sculpture towards the base of tergite (2 + 3), and in some specimens as much as the basal third of the hind tibia is pale. In Hedqvist's (1976) key to the European species of *Spathius* these British specimens have another rough ride: this time it is their rather strongly trans-striate frons and heavily fasciated wings that prevents them from running smoothly to *curvicaudis*. However, they fit Ratzeburg's (1844: 49) original description tolerably well, especially in regard to their heavily fasciated wings ("Flügel schön grau und weiss gefleckt"), and no other European species has a similar ovipositor. Ratzeburg's type (now evidently lost: Königsmann, 1964) was reared from part of a living tree in which an unidentified buprestid was developing and (despite the shortcomings of their keys, which seem to depend on unstable characters) both Nixon

\*Royal Museum of Scotland, Chambers Street, Edinburgh EH1 1JF.

(1943) and Hedqvist (1973) record species of *Agrilus*, including *pannonicus* (as *biguttatus* (Fabricius)), as hosts. The present records appear to be the first to state that it is gregarious, but are otherwise consistent with what is known of the biology of *curvicaudis* in Europe.

It is always pleasing to note that a parasitoid that is possibly dependent, at least locally, on an exceedingly restricted and scarce insect host has nevertheless managed to persist through lean times, for it is hard to imagine that *S. curvicaudis* could be a recent arrival in Britain. I urge particular tolerance for this interesting species, bearing in mind that it is probably a good deal less secure than its host. Also, it is not impossible that the combination of beetle-plus-parasitoid may be in some respect more viable than the beetle alone.

Except that I have deposited two females and one male from the series reared by H. Mendel in the British Museum (Natural History), all of the above material is now in the collections of the National Museums of Scotland.

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